

# EP/VP Series

**RFI Power Line Filters  
for Switching Power Supply  
Noise Suppression**



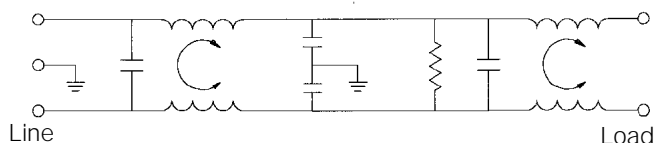
**UL Recognized†  
CSA Certified†  
VDE Approved  
SEV Approved\***

## EP/VP Series

The EP/VP series of RFI filters has been developed to reduce conducted noise to acceptable limits for equipment that must comply with the requirements of CISPR in Europe and the FCC specifications in the USA.

These filters provide high insertion loss for both line-to-ground and line-to-line emissions throughout the frequency range. They are particularly well suited for equipment that must meet both stringent emissions specifications (such as CISPR 22, A-level and FCC Part 15J, Class B) and the EP models meet very low leakage current requirements.

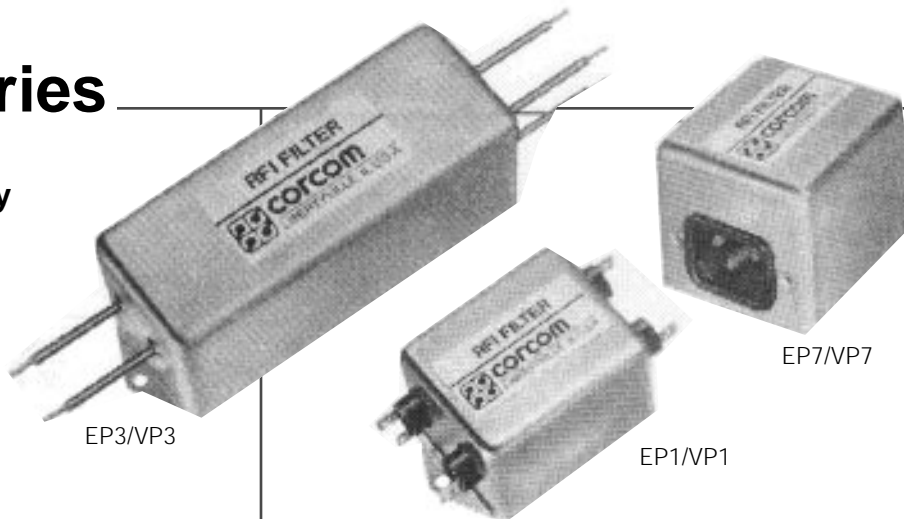
## Electrical Schematic



Resistor location for reference only.

## Line Cord

Line Cord No. GA400:  
7 1/2 foot, 3-conductor line cord.



## Specifications

	VP Models	EP Models
Maximum leakage current, each line-to-ground		
@ 120 VAC 60 Hz:	.73 mA	.21 mA
@ 250 VAC 50 Hz:	1.27 mA	.36 mA
Hipot rating (one minute):		
line-to-ground		2250 VDC
line-to-line		1450 VDC
Operating frequency:		50/60 Hz
Rated voltage:		120/250 VAC
Rated current:	<b>@ 120 VAC</b>	<b>@ 250 VAC</b>
3EP	3A	3A
6EP	6A	5A
10EP	10A	8A
20EP/VP	20A	20A
Maximum rated current peaks:		
3EP		10A
6EP		18A
10EP		30A
20EP/VP		60A

**Minimum** insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current Rating	Frequency-MHz								
	.01	.04	.05	.15	.5	1	5	10	30
<b>EP</b>									
3A	1	1	10	58	65	65	66	60	25
6A,10A	1	1	10	58	65	65	66	60	25
20A	3	6	6	28	50	55	60	55	55
<b>VP</b>									
20A	3	2	2	42	60	65	65	55	55

Line-to-line in 50 ohm circuit

Current Rating	Frequency-MHz								
	.01	.09	.15	.5	1	5	10	20	30
<b>EP1, EP3</b>									
3A	1	5	36	65	65	65	65	58	58
6A,10A	1	5	30	65	65	65	65	35	35
20A	8	17	25	60	65	65	58	58	58
<b>VP</b>									
20A	8	17	25	60	65	65	58	58	58

\*3, 6, 10A models only

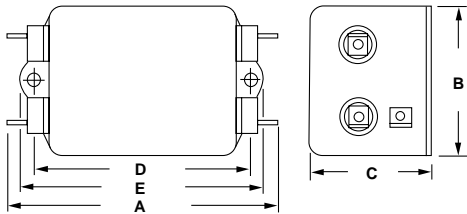
†20A models in process

# Series EP/VP

## Case Styles

Metric shown in italics.

### EP1/VP1

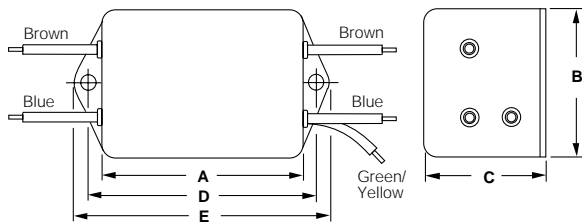


Typical dimensions

Terminals:  $\frac{.250}{6.35}$  (5) Holes:  $\frac{.07}{1.8}$  Dia. (4) Slot:  $\frac{.07 \times .16}{1.8 \times 4.1}$

Mounting holes:  $\frac{.188}{4.78}$  Dia. (2)

### EP3



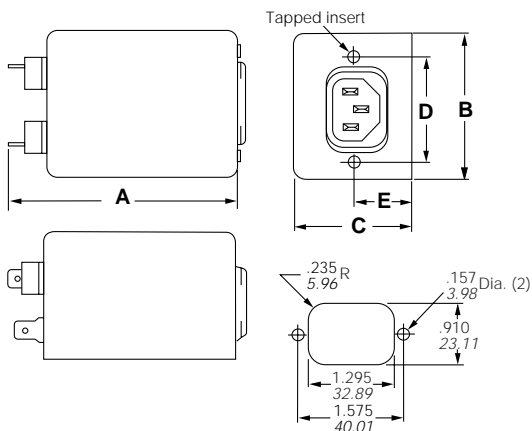
Typical dimensions

Wire leads  $\frac{4.0}{101.6}$  Min.

Mounting holes:  $\frac{.188}{4.78}$  Dia. (2)

### EP7 & EP7M (with metric insert)

Tapped insert No. 6-32 x 1/4 (2)-EP7  
No. M-3 x 5 (2)-EP7M



Panel cutout (Back mount)

Tolerance  $\pm \frac{.005}{0.13}$

Typical dimensions

Terminals:  $\frac{.250}{6.35}$  (3) Holes:  $\frac{.07}{1.8}$  Dia. (2) Slot:  $\frac{.07 \times .16}{1.8 \times 4.1}$

## Case Dimensions

Metric shown in italics.

Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3EP1	$\frac{3.85}{97.8}$	$\frac{2.07}{52.6}$	$\frac{1.78}{45.2}$	$\frac{2.938}{74.63}$	$\frac{3.35}{85.1}$
3EP3	$\frac{2.56}{65.0}$	$\frac{2.07}{52.6}$	$\frac{1.78}{45.2}$	$\frac{2.938}{74.63}$	$\frac{3.35}{85.1}$
3EP7	$\frac{3.21}{81.5}$	$\frac{2.25}{57.2}$	$\frac{1.78}{45.2}$	$\frac{1.575}{40.01}$	$\frac{0.63}{12.1}^\dagger$
3EP7M	$\frac{3.21}{81.5}$	$\frac{2.25}{57.2}$	$\frac{1.78}{45.2}$	$\frac{1.575}{40.01}$	$\frac{0.63}{12.1}^\dagger$
6EP1	$\frac{6.62}{168.1}$	$\frac{2.07}{52.6}$	$\frac{2.28}{57.9}$	$\frac{5.625}{142.88}$	$\frac{6.03}{153.2}$
6EP3	$\frac{5.33}{135.4}$	$\frac{2.07}{52.6}$	$\frac{2.28}{57.9}$	$\frac{5.625}{142.88}$	$\frac{6.03}{153.2}$
10EP1	$\frac{6.62}{168.1}$	$\frac{2.07}{52.6}$	$\frac{2.78}{70.6}$	$\frac{5.625}{142.88}$	$\frac{6.03}{153.2}$
10EP3	$\frac{5.35}{135.9}$	$\frac{2.07}{52.6}$	$\frac{2.78}{70.6}$	$\frac{5.625}{142.88}$	$\frac{6.03}{153.2}$
20EP1, 20VP1	$\frac{4.95}{125.7}$	$\frac{2.27}{57.7}$	$\frac{1.8}{45.7}$	$\frac{4.063}{103.2}$	$\frac{4.47}{113.5}$
20EP6, 20VP6	$\frac{5.09}{127.3}$	$\frac{2.25}{57.2}$	$\frac{1.78}{45.2}$	$\frac{4.063}{103.2}$	$\frac{4.46}{129.3}$

$^\dagger \pm .188$   
 $\pm 4.78$

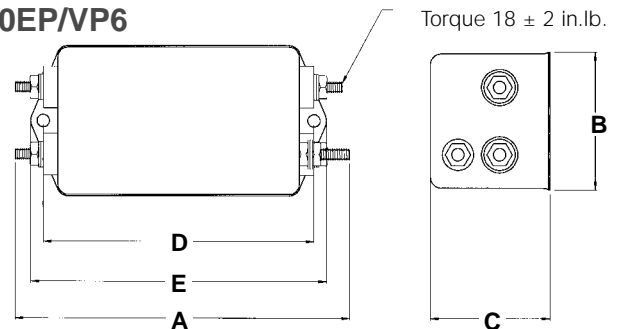
## Pricing

Consult your local Corcom sales representative for pricing.

Part No.	Part No.
3EP1	10EP1
3EP3	10EP3
3EP7	20EP1
3EP7M	20EP6
6EP1	20VP1
6EP3	20VP6

Line Cord No. GA400

### 20EP/VP6



Terminals: No. 8-32 (5)



EP  
VP  
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